

ABSTRACT

Roughly described, a machine-readable protocol database identifies a sequence of workflow tasks for a clinical trial protocol. The sequence of workflow tasks is organized as a graph whose nodes can contain or represent patient contact event objects, with one or more of the tasks assigned to each patient contact event object. The graph also indicates preferred or expected times for a patient to transition from one node to the next, and optionally also indicates a predicted likelihood that different alternative paths will be taken to a common destination node. A problem-solving method automatically extracts the time duration expected or predicted for a patient to traverse each separate phase of the protocol. Such durations are provided to a simulation engine which automatically generates timeline forecasts of patient progress through at least part of the workflow tasks prescribed by the protocol.